



**Paving the Way Forward for Rural Finance
An International Conference on Best Practices**

Case Study

**Rural Financial Institutions:
Restructuring and Post Restructure Results**

Los Andes F.F.P.

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Introduction

There has been significant progress in Bolivia over the last 15 years in relation to the enlargement of the frontier of financial services for segments not previously serviced by the formal or semi-formal system. In spite of this progress a major **rural delay** persists in further penetrating the market. Numerous circumstances explain this rural delay, and therefore, different actions will be necessary to ensure the desired progress. It is clear that the gap between urban and rural intermediation will not be closed if additional credit technology and deposit mobilization innovations are not produced to allow the sector to overcome the major obstacles to financial transactions which are present in the rural environment (Gonzales-Vega, SEFIR Notebook No. 3, 2002.)

Despite the magnitude of difficulties in entering new segments of the rural financial market, some Bolivian microfinance organizations have tried to develop credit technologies that permit them to deal successfully with the challenges of financial service frontier expansion for rural areas. One of these organizations is the private financial fund Los Andes S.A. F.F.P. This document examines some of the most interesting features of Los Andes' rural credit technology.

Both in Bolivia and within an international context, Los Andes has proved to be a particularly successful microfinance organization; however this paper contains a global evaluation and description of the **rural credit technology** developed by the said organization. The purpose of the paper is to illustrate the present situation in Bolivia, to learn general interest lessons, and to identify the challenges not yet successfully overcome. It is important to note that in the case of Los Andes the credit technology forms part of an integrated system, and, for this reason, when analyzing the technology it will often be necessary to refer to elements of the other system on which its operations are sustained.

The Los Andes rural credit technology was born as an extension of its urban credit technology, successfully developed during the early 90's. The provision of credit to rural clients has required important adjustments to the technology. Agricultural activities predominate within the rural environment, whereas the service, commerce, and minor manufacture activities that exist in these areas are, in general, secondary or dependent on the agricultural activities. Due to the fact that risks, including the high incidence of exogenous events, the production technology applied, the occurrence of investment flows, the input and output, and the type of supplies utilized by agricultural activities are very different to other types of activities, the credit technology has had to be adjusted to these specific characteristics of the rural sector. In fact, the client selection challenges (*screening*), the follow up of the credits (*monitoring*), and the opportunities to validate the contracts (*contract enforcement*) differ greatly within this context. The necessary adjustments have attempted, however, to maintain the basic principles of the urban credit technology of this organization.

The **basic principles** of the Los Andes credit technology can be summarized as follows:

- Fast and efficient service, that minimizes **transaction costs** to borrowers. This reflects the acknowledgement of the importance of client orientation.
- Evaluation of the price of products (interest rates) according to their production costs. This requires maximizing operative efficiency in order for the organization to be competitive and at the same time to meet costs. This reflects the importance of

sustainability, from the perspective of the objective of the organization and as an important influencing factor on the payment behavior of the debtors.

- Adjustment of credit terms and conditions to cater for the specific needs of each client. The relationship with each individual client is defined as a contract which permits the organization to define its competitive advantages within each market segment and to optimize both its profit and also the benefits to the client. In other words both parties gain by the customer-specific contract design. This personalized adjustment is possible due to an efficient credit technology.
- The demand for timely and prompt credit payment promotes sustainability and makes possible a long term relationship between the organization and the client. Both the organization and the client invest in a long term relationship which implies expectations and responsibility for both parties. The present value of this relationship (an intangible asset) represents an important component of the payment incentives by which Los Andes expects to exert influence on the behavior of the debtor.

The confluence of these basic principles and the efforts to deal with the characteristics of the agricultural activities are what defines the Los Andes rural credit technology. This integration is the theme of this paper. The development of rural credit technology has also benefited from the interchange of information from experience in other countries, particularly from the Calpia Financiera in El Salvador. This interchange of information is made possible through a network of microfinance organizations created by the German firm Internationale Projekt Consult (IPC.)

1. Portfolio Evolution

Los Andes started its rural credit activities some years after having developed, with success, its urban credit technology. The rural portfolio began to gain importance in December 1998 and a year later represented more than 12% of the total portfolio. Before 1998, the few assignments in rural zones represented loans to small and medium sized businesses. These loans due to the amounts assigned and the activities, (in general not agricultural), required a credit technology similar to the one applied in urban zones. Los Andes faced the challenge of developing a new credit technology for the rural zone, adapted for agriculture in order to enter the rural microcredit market.

Both in absolute terms (more than US\$ 8 million) and in relative terms (around 20% of the total amount), the rural portfolio reached its peak size in June 2001. Already in that year, the effects of the macroeconomic crisis, which Bolivia is currently going through, had resulted in a major decrease of the urban portfolio, but this crisis has not yet affected the rural portfolio, particularly the rural microcredit portfolio.

The steady growth of the rural portfolio during the first half of 2001 represented, at that moment, the positive effect of the important **diversification** advantages attained by the introduction of the rural portfolio. That is to say, rural credit had become a valuable diversification mechanism of the total portfolio of the organization. This is an interesting outcome, with regard to what is usually (correctly) supposed, that a urban portfolio **anchor** is desirable, or indeed essential, in order to diversify the risks implied by rural activities,

usually associated to climate or price variations. In other words credit activities on a urban basis, which are little related to climate, serve to diversify the risks of agricultural credit.

In some way, this outcome responds to a conservative attitude assumed by the organization on the assignation of rural credits during the last year, although this cautiousness has not been exclusive to the management of the rural portfolio. It should be noted, in any case, that Los Andes has been the microfinance institution that has best sustained its growth during the recent difficult period in the Bolivian financial system (Gonzales-Vega and Rodriguez-Mesa, Sefir Notebook No. 1, 2002.)

The other important point to note is that Los Andes has made good use of the strengths of its urban credit technology to capture market share during this crisis period. Confronted with macroeconomic and political hardships, other microfinance institutions needed to retreat in a substantial manner. On the contrary, Los Andes managed to sustain portfolio growth, recognition of the comparative strength of its credit technology.

2002 has been a period of transition in Bolivia in terms of politics. The electoral process led to administrative changes which created a disruptive series of expectations. These included expectations of political intervention in microfinance markets and, particularly in rural financial markets.

These types of expectations generally affect, in a negative way, the culture of payments, even in those cases where they are not necessarily valid, thus modifying the attitudes of the participants in the financial markets.

These political expectations also increase the **risks of regulatory change** for the financial intermediaries particularly when driven by pressure from particular interest groups. Changes within the regulatory framework have the potential to produce serious consequences for the operations of a microfinance institution. A method of reducing this risk is to decrease exposure to the portfolio potentially affected by the new regulation. This explains, in part, the conservative attitude of Los Andes, particularly in rural areas, during the said period.

Another factor which could explain this conservative position of Los Andes is the expansion of the accelerated rural credit program, which is directed, subsidized and promoted by the Productive Sector Support and Financial System Development Fund (FONDESIF, in Spanish) through a range of non-governmental organizations (NGO's) and international aid.

If in theory, some of the funds of these programs are also available to Los Andes, this organization has preferred not to seek them, to avoid the political intervention that usually is attached to the funds (Gonzales-Vega, SEFIR Notebook No. 6.) This is a courageous managerial decision because the easy access to the subsidized funds by competing organizations in the market, allows the organizations to stipulate favorable terms and conditions to clients. A self-sustainable organization such as Los Andes finds it difficult to compete in these situations.

Finally, the development of a rural portfolio requires major investment on human resources and also poses internal control challenges. Professionals, possessing a suitable profile to develop an agricultural portfolio are possibly a scarce resource in Bolivia. This theme will be developed in Section 4. In addition, due to the operation of rural credit in distant zones

with a dispersed client base, controlling the activities of the Credit Officer implies a higher cost.

2. Geographical Scope and Diversification

It is worth mentioning some of the Branch Offices where rural credit is analyzed and granted:

- The **Obrajes Office** located in the city of La Paz, is a branch office with mixed characteristics, both urban and rural. Thus, Credit Officers are defined by those who service the agricultural areas and those who service the urban zones. Out of a total of five Credit Officers, two attend the rural zones. At Los Andes, the analysts are titled **Officers** in order to emphasize his/her financial tasks, as opposed to promoters, which, in other microfinance foundations develop additional functions besides credit management. These other functions are related to technical assistance, training and education plus other social related work. Recently, the trend towards financial professionalism for the Los Andes personnel has resulted in a change to their titles. The Officers are now entitled **Commercial Officers**, this is to emphasize their additional integral commercial function of offering diverse services as well as their role as managers of a credit portfolio.
- The **Punata Office** in the Department of Cochabamba is located in a region much more oriented towards agriculture than the Obrajes Office. Although this office is based in the urban area of Punata, one hour away from the city of Cochabamba, some of the serviced areas are dedicated to purely agricultural activities, with limited possibilities of developing commercial or service oriented activities in the urban sector. This is the case, for example, of some locations in Tiraque and Sacaba. In intermediate areas, home-businesses in the small nearby urban centres and surroundings areas constitute a client population similar to the client group serviced by the Rural Credit Officers of the Obrajes office. However, the office at Punata is more rural.
- The **Campesino Market Office** in the city of Tarija also deals with an important agricultural credit component because it services areas that although are considerably close to the urban center of Tarija, are rural in nature, dedicated almost exclusively to agriculture. The degree of accessibility to some of these areas, despite being situated closer to the city than Punata, is as difficult as the farthest locations in Punata. In some locations a bus services exists only once a week.

In any case, none of the three regions covered by this study can be classified as exclusively agricultural. In all of them, the organization also services urban clients or clients that combine commercial or service activities with agricultural activities. This permits a certain degree of portfolio **diversification** in each office, useful for global risk management. In addition, when the client himself/herself develops diversified activities, the credit risk is reduced. This diversification of risk at the client level is an important factor for the Los Andes technology

3. Human Capital

Los Andes is characterized by its focus on human capital which depends on credit technology and deep analysis which is accompanied by intensive labor. Other credit technologies, based more on *credit scoring* instruments, for example, or on the delegation of the process stages to the client, as in the case of the communal banks, require that the Credit Officer be less personally involved with the decisions. On the contrary, a great deal of the functioning and performance of Los Andes is based on the work of the Credit Officer, that is, the relationship with the clients, his/her office work, the analysis of the application forms, follow up on the payment behavior, and on the decision making processes conducted by the credit committees.

This method is different from the other technologies (for example, those of consumer credit technologies) where the credit management stages are assigned to different employees and offices. In the case of Los Andes the Credit Officer is practically responsible for the complete transaction cycle, from the initial contact with the client to the payment in full of the credit. In view of the individual credit technology applied and of the personalized design of the contract, there exists a degree of discretionary decision making for the officer when completing the application to be presented for approval to the credit committee. The personal knowledge of the clients and experience in the area are important factors in the credit process. The Officer is therefore, one of the most important (not accounted) assets of the organization.

The principal characteristic of the Los Andes Credit Officers whom serve agricultural clients, which distinguishes them from those of other organizations operating in the same area or similar areas, is their training. This is one of the features which generate strong competitive advantages for this organization. All of the Credit Officials are Agricultural Engineers, six of them with masters degrees and two with degrees. This requirement reflects the explicit intention of the organization to have Credit Officers that are knowledgeable of both the technical and the practical details of the agricultural activities. This is not an obstacle for the Officers in also servicing urban clients.

It is therefore obvious that it is a necessary condition for a good Rural Credit Officer is to have agricultural knowledge. The additional knowledge required to manage an urban portfolio could if necessary be acquired at a lower cost.

In addition to agricultural education, most of the Credit Officers are native to the region where they work or, at least, have lived for a long period of time in the region. This complements their academic knowledge as they are already familiar with the agricultural practices of the region, the products, the existence or lack of water, the impact of climate on the potential results of the different activities, and the role that different members of a household might play in regard to an investment project.

In spite of the Credit Officers being individuals not coming directly from traditionally agricultural homes, they can demonstrate a great deal of identification with such sector and gain satisfaction in working in the rural area. All of the Officers had little work experience before entering Los Andes or had only worked in institutions in rural zones or in organizations directly linked to the rural sector. Previous work experience, however, has not been a determinant factor in rating the performance of the Credit Officers. Success in the Intensive training program is the most determinant factor.

3.1. Recruiting and training

One of the principal characteristics observed in applying the Los Andes credit technology is important emphasis on the training of Credit Officers. Training is long and costly to the organization. It is, however, an investment in human capital which generates high levels of output. This output refers to the productivity of Credit Officers and permanence in the organization. The high levels of productivity reflect a high output rate, whereas permanence reflects the time period during which the organization can attain such output.

In general, the process of **recruiting** is very thorough, by which the organization reaches a decision early through a rigorous selection procedure. Usually, recruiting begins with newspaper advertisements, normally a large number of applications are received. A series of requirements are stipulated which determines who will apply (*self-selection*). Among these requirements, the most important is to be an Agricultural Engineer.

After a very demanding selection process, the chosen recruits receive training normally over a time period of a month. This training includes technical courses. Two months of observation work in a rural office follow this training. It is only after these three months that the Officer is formally hired as a regular employee of the organization, but the candidates receive a salary during the training period.

4.2 Remuneration

From an economic and institutional perspective (although not necessarily an accounting), human capital, mainly represented by the Credit Officers, constitute one of the most valuable assets of the organization. Los Andes creates this value by investing in a thorough recruiting process and increases the value through continued training for the Officers. The organization must make efforts to maintain and increase this value of the officers. The efforts to maintain the value of human capital value is a complex challenge for Los Andes.

One of the instruments used to keep personnel is the **remuneration** system. This remuneration includes pecuniary elements, which in turn, consists of a fixed amount and a variable amount. This latter portion will depend of the performance of the Officer. Each of the remuneration components plays an important role in the Los Andes policy of human capital development and presents a challenge to the organization.

The complementary element to the high level of training for the Credit Officers is the competitive level of remuneration. All Officers receive a fixed salary and a bonus, calculated on the basis of client tardiness, portfolio volume, and number of loan cases. Until recently, the bonus calculation, in the case of the rural Officers, was also based on speed of service (time span between application and disbursement). This measure has been eliminated because the speed of service is also affected by external factors beyond the Officer's control. Among the interviewed Credit Officers, the bonus amount has increased in some cases to 100% of the base salary, in other words the salary level has doubled.

The application of a variable remuneration system, on the basis of certain performance parameters, is recognized in literature as an optimal way to influence a desired behavior when the worker has discretionary powers that exert important influence on the results, and also when the constant follow up (*monitoring*) of late payments by the employee is costly to the organization.

What is sought is a mechanism, to match the worker's interests with the interests of the organization (**compatible incentives**), that is not very costly. The bonus system attains this objective.

The non-pecuniary incentives also bear significant weight when considering the personnel behavior of the organization, in general, and amongst Credit Officers in particular. Officers often feel a sense of responsibility and are proud of this responsibility. In addition, they are aware that they work for an organization that is a leader in the Bolivian microfinance industry. These factors provide personal motivation, which is difficult to appraise monetarily, but without doubt contributes to the conservation of human capital for the organization. Investment in this asset is large and represents important costs to Los Andes. The challenge of Los Andes is to meet these higher costs through increased productivity of the Officers.

4. Competition

The Bolivian microfinance market has been characterized in the last years as being highly competitive. This high level competition has forced new developments in credit technology to be applied by participant intermediaries in the market. In particular, each organization has had to adjust its own methodology, information requirements, and the level of its evaluation to an increasingly saturated credit market.

In some way, the Los Andes agricultural credit technology, as applied at the time of this paper, is the result of this adjustment process. This is despite the fact that the microfinance competition is largely an urban phenomenon. Due to the fact that the agricultural credit technology has been adjusted to reflect this competition, the technology as a result has become stronger as opposed to the changes within the environment in which the Officers work.

The Los Andes credit technology has benefited, for example, from the information provided by the Risk Center of the Superintendency of Banks and Financial Institutions, as well as from other similar information sources which possess information on the overdue payment of clients. This information is shared by various regulated and non-regulated organizations. The information is a byproduct of the evaluation difficulties faced by institutions when assessing the credit capacity in the case of shared clients and of the possible dangers of over indebtedness. The necessity of relying on this information grew with the increase of urban microfinance competition, which has generated positive effects for the development of rural microfinance.

As a result of the analysis work carried out on the competitors in the microfinance agricultural sector, it has been realized that there is not a serious competition problem in this market.

5. Productivity

Comparing the portfolio statistics of the two Rural Credit Officers interviewed at the Obrajés Office, and the portfolio data of the two Urban Credit Officers from the same office, it has been observed that in spite of the greater difficulties to grant credits in rural zones, there appears to be no major differences between Rural and Urban Officers, in terms of number of

clients serviced. However, the total portfolio amount is considerably higher for the Urban Officers. On average, therefore, Urban Officers disburse larger loan amounts and attain, through their larger portfolio, the ability to generate higher income in terms of their bonus.

This difference between the urban and rural portfolio is also noticeable in the disbursement of new credit, whereas the disbursements of loans to repeat clients does not show a major difference between the two areas. The average credit amount, however, is considerably higher in the urban sector, both in the case of new credit and in the case of loans for repeat clients.

The fact that rural credit is considerably smaller, even to clients who are initiating their relationship with the organization, demonstrates Los Andes conservative management of this type of credit as well as the credit demand differences between the two areas.

6. Fundamental Principles of Credit Technology

Los Andes has founded the application of its credit technology on the following pillars:

- (a) The payment ability of the socio-economic unit as a whole.
- (b) The seasonality of the different activities, for example, the principal installment payments are scheduled for the harvesting months and grace periods are allowed for the months when the crops are not producing.
- (c) The client payment records. Clients that have demonstrated a willingness to pay during previous periods have improved probabilities of obtaining the desired credit amounts. Clients having been somehow late in making payments may be faced with a degree of rationing or higher levels of guarantee demands, and
- (d) The client loan records. New clients have higher probabilities of being rationed, even if having sufficient guarantees and have no late payments recorded by other institutions in the past, in accordance with the Risk Center.

The guarantees and interest rates are defined by the Credit Regulatory Body therefore the Officer has less discretionary power to define these conditions. In the case of the guarantees, the presentation of personal guarantors for small amounts is the usual practice when there exists some doubt about the domiciliary stability of the client or his/her paying ability. When a personal guarantor is presented, the Credit Officer also needs to visit him/her to make a general evaluation.

The disbursement of a loan requires two visits of the client to the office, one for the application and the other for the disbursement of the loan. An evaluation visit by the Credit Officer to the client is also required. The installment payments do not require the presence of the borrower and may be honored at any convenient moment for the borrower within the payment schedule. The coordination of the disbursements and form-filling on days when the client needs to visit the urban area and the simplification of the process to a minimum number of days are some of the principal advantages that Los Andes offers to clients from the agricultural sector.

7. Conclusions

The experience gained in the development of rural credit technology at Los Andes can be highlighted using a series of principles. These principles can be used as good starting points for other organizations keen to enter this market. Although for other organizations local circumstances might be different, the principles learned through the Los Andes experience are reference parameters learned by an organization that has proved to be successful in this market.

Los Andes developed its rural credit technology as an extension of a proven successful urban technology. Consequently, both technologies share common features that explain their success, both rural and urban. The emphasis placed on service quality, the minimization of transaction costs to the organization and to the borrower, the commitment to sustainability and customer specific credit contracts are some of these common principles. The commitment to pay promptly and the long term relationship with the borrowers are two other basic principles that are important from the viewpoint of contract execution.

An efficient rural credit technology has permitted Los Andes to expand its portfolio in the rural micro-credit area, however, such expansion faces boundaries set by the political, social, and economic context of the country. For this reason the institution demonstrates aggressive commercial behavior but with stringent risk evaluations.

Regarding portfolio diversification, Los Andes provides an example of the benefits that such diversification generates in the face of systemic risks. Diversification within the urban-rural dimension is a particularly important alternative for microfinance organizations that typically operate in urban or semi-urban market niches.

The concept of diversification is constant in the development of Los Andes which is observed at the internal level at branch offices. This becomes important when analyzing potential clients, in view of the delegated diversification which characterizes the Los Andes credit technology. The measurement of the degree of diversification is a key variable in credit approval decisions. All of these levels of diversification imply that the risk is to be shared between the participants in financial transactions, from the organization as a whole to the individual borrowers, through the regional offices and the Credit Officers. This is a basic lesson for microfinance in general.

The experience of this organization also suggests a expansion strategy of branch offices and agencies. The installation of branch offices in rural zones must not only follow financial equilibrium point principles but also this equilibrium must be defined in terms of potential clients who would be reachable by means of a particular credit technology. Given the importance of diversification to Los Andes, the expansion towards areas each time more exclusively agricultural is a challenge to the organization, a challenge that is also manifested at the Credit Officer level. The observations made seem to suggest that, to attend a purely agricultural client population, Credit Officer specialization in this segment is justified.

Credit Officers are the fundamental part of credit technology. They are the people who establish contact with the clients, collect the required information, evaluate them, propose the terms and conditions of each individual contract, and make themselves responsible for each one of these contracts to be honored by the agreed deadline. Also, Credit Officers are the principal means of transmitting the image of the organization. This characteristic,

although not unique to rural technology, becomes more important for this technology, given the isolation of potential rural clients and the influence exerted by other types of organizations, less influenced by market conditions. Los Andes has contributed to change the perception of credit which has been viewed wrongly as a paternalistic concession instead of a valuable contract among two parties.

The rural agricultural dimension seems to impose a critical additional restriction to the profile of the Credit Officer: his/her agricultural academic background. This requirement seems to predominate over the financial knowledge that the potential Officer might have acquired. Furthermore, in view of the education that agriculturalists receive, the organization has had to invest in training not only in regard to the basic financial principles but also on the mission of the organization. In particular, to service this market from a professional viewpoint, that departs from the possible paternalistic view of individuals having received an agricultural education

The considerable investment in the development of Credit Officers within these two fields is one of the requirements of this credit technology, in order to create skills and attitudes aimed at personal contact with clients. For this reason, an adequate remuneration, pecuniary and non-pecuniary, is essential for the organization to avoid a high rotation of Officers and to maximize output. The application of a bonus system with flexible parameters is an element that generates not only stability in personnel numbers but also an effective and efficient instrument for converting the managerial objectives into practice. Credit Officers are the most costly elements in the application of the technology and, therefore, any technological innovation that might help to increase their productivity may produce a large impact on the results of the organization. This is the major challenge for Los Andes, the improvement of the credit technology that has been successfully developing.

The principal functions of the rural credit technology used by the Credit Officers are the evaluations of potential clients, including the analysis on their farmlands office research and client tardiness control. These two activities and the time spent on transportation consume the majority of the time of an Officer. Any reduction in the invested times on these activities, without reducing portfolio quality, would yield significant benefits to the organization profitability. For client analysis, established format evaluations, databases on credit information, and production levels and prices contribute to this efficiency. Technological improvements for data collection and ready access to information appear to be the best ways to increase productivity. For client tardiness control, the employment of specialized personnel working jointly with the agents could save resources for the organization, although this is already practiced by some agencies. A transportation time reduction beyond the present limits seems to be difficult without the improvement to the Bolivian road infrastructure.

As mentioned before, an essential element of the rural credit technology is the definition of the terms and conditions of the credit contract in accordance with the characteristics of the agricultural activities, in other words client specific contracts. In addition to the adjustment of repayments of credit to cater for the agricultural activities of the business, the use of available guarantees by the agricultural producer is another of the elements that enables this technology to reach small rural producers. However, an extension of the range of assets that may be used as a guarantee, including crops and cattle, could be an important adjustment and would help in expanding the application of this technology.

Finally, the Los Andes rural credit technology can be summarized by the principles of efficient service, detailed assessment of clients to determine their payment capability and will to pay, level of diversification or exposure to risk, client-specific contracts, and finally the maximization of Credit Officer productivity accompanied by intensive training and competitive remuneration.